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EXAMINER

HO, CHUONG T

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### **DETAILED ACTION**

1. The amendment after Final Rejection filed 11/20/09 have been entered and made of record.

### ***Response to Arguments***

2. Applicant's arguments filed 11/20/09 have been fully considered but they are not persuasive.

#### Independent Claims 1 and 18

In the page 7, lines 9-18, the applicant argues Sindhu '660 does not present a shared memory, the columns of table 508 are not buffers, and the rows of table are not banks.

Neither Muller '132 nor Sindhu '660, alone or in combination, disclose or suggest that a shared memory comprises two or more buffers and two or more banks\_, wherein each of the banks comprises portions, wherein each of the two or more buffers comprises a portion from each Of the plurality of banks, and wherein each Of the buffers identifies an address o fa location in each of the banks.

The examiner respectfully disagrees with the applicant's argument.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Muller '132 disclose storing in said shared memory (figure 3A, col. 8, lines 38-40, the shared memory 230 is segmented into a number of buffers) and two or more banks (col.8, lines 43-45, the buffers may be further subdivided into a number of memory lines), wherein said shared memory comprises two or more buffers (col.8, lines 38-40, number of buffers), at least a portion of a packet in a first buffer of said two or more buffers (col. 8, lines 52-60, a given packet's data may be stored in one or more buffers) (col.12, lines 23-25, global data buffer 104 includes a plurality of memory banks 105); where each of said two or more buffer comprises a portion from each of said plurality of banks (col.8, lines 43-45, the memory lines) (col.8, lines 43-45, the buffers may be further subdivided into a number of memory lines)

Sindhu '660 disclose at least portion of a packet in contiguous banks of a first buffer (col. 12, lines 23-25, the global data buffer 104 includes a plurality of memory banks 105, col. 14, lines 45-47, a bank's memory is divided into two contiguous non overlapping regions) of said two or more buffers; wherein each of said buffers (Abstract, col. 2, lines 30-32, the distributed memory includes two or more memory banks) identifies an address of a location in each of said banks (Col.8, lines 49-55, a pointer 504 indicates the location in an associated bank to which the next cell will be written. Output processor 505 writes a cell to a memory location in a particular memory bank based on the next available address in the bank as is indicated by the associated pointer 504) (col.22, lines 40-57, bank numbers, all bank pointers)

For the reasons above, the examiner respectfully believes the independent claims 1 and 18 were rejected under 35 U.S.C. 103 as being unpatentable over Muller '132 in view Sindhu '660 should be sustained.

Independent claim 9

In the page 9, lines 1-6, lines 28-32, the applicant argues that Muller '132 and Manning '736, alone or in combination, do not disclose or suggest wherein said buffer usage count provides an indication of a sum over all packets in said at least one of said buffers of a number of output ports toward which each of said packet is destined, wherein said at least one of said buffers contains two or more packets and wherein at least one of the packets is destined for more than one output ports.

The examiner respectfully disagrees with the applicant's argument.

Muller '132 disclose wherein said buffer usage count (col.2, lines 25-26, buffer usage for each of a number of buffers) provides an indication of all packets in said at least one of said buffers of a number of output ports toward which each of said packet is destined (col. 12, lines 30-31, the other two output ports 206 complete transmission of the buffer and so notify the buffer tracking unit 329 Write "SUM" = 0010b) (col. 12, lines 27-30, The buffer tracking unit 329 processes the input port's 0010b notification which indicates there are 3 buffer owners. Read: 1110b Modify: 1110b + 0011b + 0001b = 0010b Write: 0010b The other two output ports 206 complete transmission of 0010b the buffer and so notify the buffer tracking unit 329),

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wherein said at least one of said buffers contains two or more packets (see abstract, buffers for temporary buffering the packets); and

wherein at least one of said two or more packets is destined for more than one output port (col. 1, lines 60-65, packet buffer for temporary storing packet data until it can be forwarded (destined) to the appropriate output ports)

Manning '736 discloses wherein said buffer usage count (col.5, lines 30-40, col.6, lines 22-30) lines Buffer\_Counter) provides an indication of a sum (col.5, lines 20-27, total number of cells) over all packets in said at least one of said buffers of a number of output ports (Figure 16, number of output ports from receiver element) toward which each of said packet is destined (col.6, lines 22-32, the buffer counter decreases when the cells forwarded out) (col.5, lines 30-40, the buffer counter increases when receiving the cells).

For the reasons above, the examiner respectfully believes the independent claim 9 was rejected under 35 U.S.C. 103 as being unpatentable over Muller '132 in view Manning '736 should be sustained.

#### Dependent Claims 2-8, 10-13 and 19-24

For the same reasons, it is believed that the rejection to dependent claims 2-8, 10-14 and 19-24 which depends on independent claims 1, 9 and 18 should be sustained.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571)272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sheikh Ayaz can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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